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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,342	01/23/2004	Hidehiko Asai	03500.017847.	5188

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EXAMINER

DHINGRA, PAWANDEEP

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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11/28/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/762,342	ASAI, HIDEHIKO	
	Examiner	Art Unit	
	PAWANDEEP DHINGRA	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 12, 15, 17-19, 21 and 28 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 12, 15, 17-19, 21 and 28 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

- This action is responsive to the following communication: amendment after non-final action filed on 9/19/2011.
- Claims 12, 15, 17-19, 21 and 28 are pending.

Response to Arguments

Applicant's amendments, filed 9/19/2011 have been entered and fully considered. However, applicant's arguments filed 9/19/2011 have been fully considered but they are not persuasive.

Applicant argues that none of the cited references teach the newly amended features of independent claims.

In reply, examiner asserts, please see the rejections below, the combination of references used has been successfully shown to teach all the limitations of independent claims.

Examiner Notes

Examiner cites particular paragraphs, columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially

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teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12, 15, 17-19, 21 and 28 are rejected under 35 U.S.C. 103 as being unpatentable over Yoshida Takehiro et al., JP 2002-016812 in view of Funamizu et al. , US 5,867,279 further in view of Suzuki, US 5,289,570.

Re claim 12, Yoshida discloses an image forming apparatus (image communication device, drawing 8) which has an image repeat function (see abstract, drawings 14-15, paragraphs 92-100) capable of performing a layout process (see drawings 14-15) to arrange plural same data (see drawings 14-15, paragraphs 92-100) in a first direction (horizontal direction) and in a second direction (vertical direction) on a same face of one recording sheet (see drawings 14-15, paragraphs 92-100), comprising: a first accepting unit (final controlling element 120, drawing 8, note that element 120 has a user interface with a ten key and a set key) configured to accept, from a user a number of the same data repeatedly arranged (drawings 14-15) in the first direction independently of a number of the same data repeatedly arranged

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(drawings 14-15) in the second direction, (Yoshida also teaches accepting, from a user a number of the same data repeatedly arranged (drawings 14-15) in the a direction independently of a number of the same data repeatedly arranged (drawings 14-15) in another direction) (see abstract, paragraphs 70-71, 75, 97, note that instead of printing four identical images (two images in vertical direction and two images in horizontal direction as shown in drawing 14) on one A4 size sheet of paper, system (CPU 122, which controls the whole system) can be made to print two or three identical images based on a user's instruction on one A4 size sheet of paper. Further note that paragraph 97 clearly mentions that typically when data received is of A6 size and the record paper is of A4 size, four identical images are printed on one A4 size recording sheet. But, the system could be made to print two or three images instead of printing standard four images in first and second direction on one A4 size sheet. Thus, in order to make the system perform differently from typical processing, a user instruction of some sort has to be taking place). Yoshida further discloses a second layout mode (see drawings 14-15) being that, in the image repeat function, the ~~mutually~~ adjacent same data of the number accepted by said first accepting unit are arranged in the first direction without an interval (see drawings 14-15, note that there is a boundary/cut line, CL to clarify the separation between the plural same ~~mutually~~ adjacent images arranged in the first direction but there is no interval or margin between the images, see paragraphs 92-100), and the ~~mutually~~ adjacent same data of the number accepted by accepting unit are arranged in the second direction without an interval (see drawings 14-15, note that there is a boundary/cut line, CL to clarify the separation between the plural same adjacent images arranged

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in the second direction but there is no interval or margin between the images, see paragraphs 92-100); a controller (CPU 122, drawing 8, CPU which controls the whole system) configured to arrange the same data of the number accepted by said first accepting unit in the first direction and arrange the same data of the number accepted by accepting unit in the second direction and the same data of the number accepted by said first accepting unit in the first direction without an interval and the same data of the number accepted by accepting unit in the second direction without an interval in a case where an image forming job executed by the image forming apparatus is an image forming job for which the second layout mode is selected (see paragraphs 92-100, drawings 14-15 with text and explanation given above).

Yoshida fails to explicitly disclose a second accepting unit configured to accept, from a user the number of same data repeatedly arranged in a second direction independently of a number of the same data repeatedly arranged in a first direction; a selecting unit configured to select, for each image forming job executed by the image forming apparatus, a first layout mode or a second layout mode, the first layout mode being that, the ~~mutually~~ adjacent data are arranged in the first direction with at least one interval, and the ~~mutually~~ adjacent same data are arranged in the second direction with at least one interval; and a controller configured to arrange the data in the first direction with at least one interval and arrange the data in the second direction in a case where an image forming job executed by the image forming apparatus is an image forming job for which the first layout mode is selected by said selecting unit, and execute the second layout mode in a case where the second layout mode is selected by said selecting unit.

However, Funamizu teaches a second accepting unit (see fig 44B) configured to accept, from a user the number of same data repeatedly arranged (figs. 36-38, same data is repeated, note that A4 or A3 originals can have same data which is repeated as N in 1 data) in a second direction(vertical) independently of a number of the same data repeatedly arranged (figs. 36-38, see explanation above) in a first direction (horizontal) (see figs. 32-35, 44 with text, note that user can choose the number of data to be arranged in a vertical direction and a number of data to be arranged in a horizontal direction independently of each other based on user's preference) (note that fig. 32 shows a 4 in 1 configuration wherein 2 of data are in horizontal and 1 in vertical row).

Suzuki teaches a selecting unit (UI 80, fig. 5) configured to select, for each image forming job executed by the image forming apparatus (note that for each image, image data and boundary region specifications can be edited or changed via the user interface) (see col. 4, lines 56-59, col. 20, lines 1-37), a first layout mode (see figures 23-27 with text) or a second layout mode (see figures 19-22 with text), the first layout mode being that, the ~~mutually~~ adjacent data are arranged in the first direction (horizontal) with at least one interval, and the ~~mutually~~ adjacent data are arranged in the second direction (vertical) with at least one interval (see figures 23-27 with text, note that boundary region, M has white data as margin between the ~~mutually~~ adjacent data (G1-G4) arranged in horizontal and vertical directions), the second layout mode being that, the ~~mutually~~ adjacent data are arranged in the first direction without an interval, and the ~~mutually~~ adjacent data are arranged in the second direction without an interval (see figures 19-22, note that boundary region, M

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does not have any white data as margin between the ~~mutually~~ adjacent data (G1-G4) arranged in horizontal and vertical directions); and a controller (CPU 103, fig. 5, note that CPU controls the whole picture image editing system including editing means, boundary means, input from UI and interrupt processing routine) configured to arrange the data in the first direction with at least one interval and arrange the data in the second direction with at least one interval in a case where an image forming job executed by the image forming apparatus is an image forming job for which the first layout mode is selected by said selecting unit (see figures 23-27 with text, note that boundary region, M has white data as margin between the ~~mutually~~ adjacent data (G1-G4) arranged in horizontal and vertical directions), and the data in the first direction without an interval and the data in the second direction without an interval (see figures 19-22, note that boundary region, M does not have any white data as margin between the ~~mutually~~ adjacent data (G1-G4) arranged in horizontal and vertical directions) in a case where an image forming job executed by the image forming apparatus is an image forming job for which the second layout mode is selected by said selecting unit (see figs. 19-22 with text).

It would have been advantageous to modify the image communication device of Yoshida to include image copying techniques as taught by Funamizu and the picture image editing system and techniques as taught by Suzuki for the benefit of setting a layout for arranging number of data in horizontal and vertical directions independently of each other on a single sheet of paper based on user's preference as taught by Funamizu in figures 36-38, 44 and "forming single-page picture image data in a page memory device by editing a plurality of sets or groups of picture image data input from an

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input unit, and then furnishing such picture image data edited in a single page format to picture image output equipment" as taught by Suzuki at column 1, lines 5-15. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Yoshida with the apparatuses of Funamizu and Suzuki to reach the aforementioned advantage.

Re claim 15, claim 15 recites identical features, as claim 12, except claim 15 is a method claim. Thus, arguments made for claim 12 are applicable for claim 15.

Re claim 17, Yoshida in view Funamizu further in view of Suzuki discloses wherein the said selection step enables selection of either one of the first layout mode and the second layout mode (see Suzuki, col. 4, lines 56-59, col. 20, lines 1-37; figs. 19-26 with text) in the image repeat function (see Yoshida, abstract; drawings 14-15 with text) through an operation unit (UI 80, fig. 5 of Suzuki) of the image forming apparatus (copying machine of Suzuki as a whole as shown in fig. 2) (see Suzuki, figures 2,5 with text).

Re claim 18, Yoshida in view Funamizu further in view of Suzuki discloses wherein the image forming apparatus (Yoshida, drawing 1; Suzuki, figure 2) is capable of printing based on either one of data sent from a scanner (Suzuki,

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element 20, figures 2, 5 with text) and data sent from a computer (see Yoshida, paragraphs 9, 121-123, note that data can be sent from a PC to another PC and can be printed; Suzuki element 80, figs. 2, 5 with text).

Re claim 19, Yoshida in view Funamizu further in view of Suzuki discloses wherein said selection step enables to select either one of the first layout mode and the second layout mode (see Suzuki, col. 4, lines 56-59, col. 20, lines 1-37; figs. 19-26 with text) in the image repeat function through an operation unit (UI 80, fig. 5 of Suzuki) of a computer (see Suzuki, figures 2, 5 with text; Yoshida, paragraphs 121-123).

Re claim 21, claim 21 recites identical features, as claim 15, except claim 21 merely deals with executing the method of claim 15 on a computer. Thus, arguments made for claim 15 are applicable for claim 21.

Re claim 28, Yoshida discloses an image forming apparatus (image communication device, drawing 8) which has an image repeat function (see abstract, drawings 14-15, paragraphs 92-100) capable of performing a layout process (see drawings 14-15) to arrange plural same data (see drawings 14-15, paragraphs 92-100) in a first direction (horizontal direction) and in a second direction (vertical direction) on a same face of one recording sheet (see drawings 14-15, paragraphs 92-100), comprising: a first accepting unit (final controlling element 120, drawing 8, note that element 120 has a user interface with a ten key and a set key) configured to accept, from a user a number of the same data repeatedly arranged in the first direction independently of a number of the same data repeatedly (see explanation given above)

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arranged in the second direction (see abstract, paragraphs 70-71, 75, 97, note that instead of printing four identical images (two images in vertical direction and two images in horizontal direction as shown in drawing 14) on one A4 size sheet of paper, system (CPU 122, which controls the whole system) can be made to print two or three identical images based on a user's instruction on one A4 size sheet of paper. Further note that paragraph 97 clearly mentions that typically when data received is of A6 size and the record paper is of A4 size, four identical images are printed on one A4 size recording sheet. But, the system could be made to print two or three images instead of printing standard four images in first and second direction on one A4 size sheet. Thus, in order to make the system perform differently from typical processing, a user instruction of some sort has to be taking place); and a controller (CPU 122, drawing 8, CPU which controls the whole system) configured to arrange the same data of the number accepted by said first accepting unit in the first direction without an interval and the same data (see explanation given above) of the number accepted by accepting unit in the second direction without an interval in a case where an image forming job executed by the image forming apparatus is an image forming job which is selected not to make the interval between data and data (see drawings 14-15, note that there is a boundary/cut line, CL to clarify the separation between the plural same ~~mutually~~ adjacent images arranged in the first direction but there is no interval or margin between the images, see paragraphs 92-100), and the ~~mutually~~ adjacent same data of the number accepted by accepting unit are arranged in the second direction without an interval (see drawings 14-15, note that there is a boundary/cut line, CL to clarify the separation between the plural same

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adjacent images arranged in the second direction but there is no interval or margin between the images, see paragraphs 92-100).

Yoshida fails to disclose a second accepting unit configured to accept, from a user, a number of the same data repeatedly arranged in the second direction independently of the number of the same data repeatedly arranged in the first direction; a selecting unit configured to select, for each image forming job executed by the image forming apparatus, whether to make an interval between data and data; and a controller configured to arrange the data in the first direction with at least one interval and arrange the data in the second direction in a case where an image forming job executed by the image forming apparatus is an image forming job for which said selecting unit select to make the interval between data and data.

However, Funamizu teaches a second accepting unit (see fig 44B) configured to accept, from a user a number of same data repeatedly arranged in a second direction (vertical) independently of a number of the same data repeatedly arranged (see explanation given above) in a first direction (horizontal) (see figs. 32-35, 44 with text, note that user can choose the number of data to be arranged in a vertical direction and a number of data to be arranged in a horizontal direction independently of each other based on user's preference) (note that fig. 32 shows a 4 in 1 configuration wherein 2 of data are in horizontal and 1 in vertical row).

Suzuki teaches a selecting unit (UI 80, fig. 5) configured to select, for each image forming job executed by the image forming apparatus (note that for each image, image data and boundary region specifications can be edited or changed via the user interface) (see col. 4, lines 56-59, col. 20, lines 1-37), whether to make an interval between data and data (see figures 19-26, layout mode with or without an interval between images can be selected) and a controller (CPU 103, fig. 5, note that CPU controls the whole picture image editing system including editing means, boundary means, input from UI and interrupt processing routine) configured to arrange the data in the first direction (horizontal) with at least one interval and arrange the data in the second direction (vertical) with at least one interval in a case where an image forming job executed by the image forming apparatus is an image forming job for which said selecting unit select to make the interval between data and data (see figures 23-27 with text, note that boundary region, M has white data as margin between the ~~mutually~~ adjacent data (G1-G4) arranged in horizontal and vertical directions) and arrange the data in the first direction without an interval and the data in the second direction without an interval in a case where an image forming job executed by the image forming apparatus is an image forming job for which said selecting unit select not to make the interval between data and data (see figures 19-22, note that boundary region, M does not have any white data as margin between the ~~mutually~~ adjacent data (G1-G4) arranged in horizontal and vertical directions).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAWANDEEP DHINGRA whose telephone number is (571)270-1231. The examiner can normally be reached on M-F, 9:30-7:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. D./

Examiner, Art Unit 2625

/David K Moore/

Supervisory Patent Examiner, Art Unit 2625